

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-000031**Date Inspected:** 02-Dec-2006**Project Name:** SAS Superstructure**OSM Arrival Time:** 800**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Huang Wei**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** N/A**Summary of Items Observed:**

Office of Structural Materials Quality Assurance Inspector (QA), Mark Wright observed quality control functions related to procedure qualification (PQR) testing at the ZPMC facility in Shanghai, China for the San Francisco Oakland Bay Self Anchored Suspension Bridge

Item	Description	WBS	Dwg No.	Status
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1

The QA Inspector observed welding of a Procedure Qualification (PQR) test plate identified as HP-2006119-2. The test was conducted using Gas Metal Arc Welding (GMAW), Supertech SM-70, electrode in the 1G (flat) position to AWS D1.5, Section 5.13 (Production Procedure). The QA Inspector observed ZPMC Quality Control (QC) recording the essential variable (amps, volts, travel speed) for each pass and randomly verified the parameters using an amprobe amperage / voltage meter and a stopwatch.

The QC Inspector observed micro porosity in the ninth pass of the PQR welding and informed the QA Inspector that the welder would grind this weld bead out before continuing the weld test. The welder removed the entire pass before starting the next pass. See photo below.

WELDING INSPECTION REPORT

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Summary of Conversations:

Item	Description	WBS	Dwg No.	Status
1	<p>The QC Inspector with ZPMC Quality Control (QC) stated the RT film for PQR HP-2006107-2 would be rejected by QC due to linear indications located at the root. The QC Inspector stated that the PQR would be re-run at a later date.</p> <p>The QC Inspector stated that weld pass number nine of the PQR 2006119-2 would have to be removed due to micro porosities observed in the weld.</p>			

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659,, who represents the Office of Structural Materials for your project.

Inspected By:	Wright,Mark	Quality Assurance Inspector
Reviewed By:	McClary,David	QA Reviewer
